THUSARA SARATH

Software Engineer
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PROFESSIONAL PROFILE

Software Engineer with a proven record of architecting software, interfacing with clients, and working with different environments and frameworks. Expertise in C++ and C# with an interest in JavaScript and Python.

SKILLS

- Languages: C/C++, C#.NET, Java, JavaScript, CSS, HTML, SQL
- Tools: JIRA, Git (GitHub, Bitbucket), TFS
- Environments: Linux/Windows, Visual Studio, Sublime Text, CLion IDE, WebStorm

EXPERIENCE

Software Developer – *AbacusNext Inc.* 2017-Present

Working in a team of five on a C# / SQL application: A Case Management software for lawyers.

- Implemented new user stories, improved runtime performance, and fixed bugs.
- Wrote and updated SQL Queries/Views/functions/stored procedures to handle software requirement changes.
- Worked with Team Foundation Server (TFS) version control and issue tracking.
- Other Tasks: Agile (scrum meetings, sprints, etc.), UX Design, Bug Isolation.

Software Engineer – *NeuronicWorks Inc.* 2015-2017

Lead developer and/or team member spanning multiple software projects in C++ and C#.

- Improved C# software used to control a 120 DSLR Camera 3D scanning system by reducing over 80% of crash reports, redesigning UX elements, and adding new features.
- Worked with .NET Entity Framework for SQL queries. Wrote code-based database migration scripts.
- Efficiently traced though newly inherited source code and fixed bugs and/or added features for multiple projects.
- Used Agile methodology: JIRA issue tracking, git version control, Git-Flow branching model.
- Met with clients for requirements analysis and software prototyping based on project timeline/budget.
- Collaborated with industrial designers and firmware engineers and mentored coworkers.

Co-Founder & Lead C++ Developer – *FFsplit* 2012-2015

Designed and implemented a software solution for desktop content streaming with over 110,000 downloads.

- Rapid software development (RAD) using Bitbucket revision control in C++/C#.
- Considerably minimized CPU usage by refactoring older graphics code into efficient DirectX code.
- Created a DirectShow plugin that interfaced with the popular FFMPEG open source library.
- Increased performance by over 200% on multicore CPUs by using multithreading.
- Communicated with over a thousand end-users and aggregated user feedback and bug reports.

PROJECTS

Personal Music Streamer – *Hobby Project* 2017-Present

- Developing a music streaming application using JavaScript (Vue.js) and the Go language.
- Experimenting with Node.js and Laravel, JSON, and web sockets.

Athletic Performance Tracker – *Hack'N'Talk Hackathon* 2015

- Designed a wearable microcontroller with accelerometers to transmit positional data over Bluetooth in C++.
- Developed a Java program to graph the data in real-time to help find patterns in athletic movement.

ARM Cortex Media Player – *University Project* 2014-2015

- Programmed an ARM Cortex M3 Microcontroller in C and Assembly to display images on an LCD screen, play audio files, and process joystick input.
- Leveraged RTOS capabilities such as threading and task scheduling to significantly increase responsiveness.

EDUCATION

- Bachelor of Computer Engineering – Ryerson University 2015
- International Baccalaureate (IB) Diploma – Victoria Park Collegiate Institute 2008